INSPECTION EQUIPMENT INTEGRITY ENHANCEMENT SYSTEM

Dkt: 869.045US2(GMI 5516USA-D1)

REMARKS

This responds to the Office Action mailed on March 18, 2005. Claim 11 was amended. Claims 11-54 are now pending in this application.

§103 Rejection of the Claims

Claims 11-54 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lhoest (U.S. 5,946,217) in view of Nakagawa (U.S. 6,711,874 B1) and further in view of Neary (U.S. 6,751,524 B2). This rejection is respectfully traversed.

Claim 1 has been amended to clarify that the integrity checking logic and the sensors are independent from the checkweigher logic. The amendment is not believed to introduce new issues, as it simply more clearly points out what the term already meant. The term "independent" is used and defined in the application in at least the following language: "By using a processor totally independent of the checkweigher, the integrity checker is expected to identify multiple possible conditions. While some checkweighers are designed to detect similar conditions, the integrity checker insures that the checkweigher is operating correctly." Page 5, lines 1-4. This language describes that the claimed invention provides a checking of the operation of a checkweigher in an independent manner.

In the response to arguments section of the Final Office Action, the Examiner indicates that all the components in Nakagawa and Lhoest can be construed as independent and working individually. This assertion is respectfully traversed. Nakagawa is cited as disclosing a weight checker control unit 30 and weight detector 305 that work independently from the other components such as a seal checker control unit. It is asserted that the weight detector and weight checker control unit may only be interpreted as integral components of a checkweigher. The weight detector 305 provides input directly to the control unit 30. Thus, there is no independence of these components as the term is used. They are both part of a checkweigher. It is simply not understood how it is relevant that these components are independent of a seal checker control unit that is not related to movement of packages through a checkweigher system.

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Nowhere does Nakagawa describe integrity checking logic that independently provides checking of packs moving through a checkweigher system.

In section 2 of the final rejection, the Examiner states that "Nakagawa discloses use of a weight checker (30 or 300) (construed as a checkweigher) with integrity check circuitry (see figures 9a, and 10, for example as well as col. 5 lines 22-31) as part of a pharmaceutical packaging apparatus with conveyor (310). Note also figures 8a, 9a and 10, which discloses integrity check circuitry for use in checking the checkweigher. These flowcharts indicate logic which is part of the check weigher controls (30) and seal checker controls (40). See col. 10, line 30-col. 11, line 67. The logic can be construed as Applicant's integrity checking logic." This statement is respectfully traversed. The check weigher controls (30) in Nakagawa, are not independent from the checkweigher system, but are part of it. The seal checker controls (40) do not check the integrity of the checkweigher system. It is simply not relevant that they appear independent from it, because they have nothing to do with checking the integrity of a checkweigher. Thus, Nakagawa does not disclose, teach, or suggest the claimed independent integrity checking.

Claim 1 specifically recites: "integrity checking logic independent from the checkweigher logic; and multiple sensors that are independent from the checkweigher logic and provide information to the independent integrity checking logic regarding movement of the packs through the checkweigher system." The term "independent" cannot be ignored, nor be overly broadly interpreted to include elements of the checkweigher itself (checkweigher controls 30) or elements having nothing to do with checking the operation of a checkweigher (seal checker controls 40). Thus, since the references do not teach or suggest this claim language, a proper prima facie case of obviousness has not been established, and the rejection should be withdrawn.

Dependent claims 12-21 depend from claim 11 and are believed allowable for at least the same reasons. They further define elements of the claimed invention that have not been specifically addressed in the rejection, such as a sensor for pack skew prior to weighing in claim 13, whether a pack is properly traveling down a reject path as in claim 15, backups on a reject path per claim 16, an accept path sensor in claim 17, whether the accept path is blocked per claim 18, whether a reject device has sufficient air pressure per claim 19, generation of messages

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per claim 20 and the ability to shut down the conveyor belt per claim 21. Each of these elements are independent of the checkweigher itself. No such independence is shown in the references.

Independent claim 22 recites "A method of checking the integrity of a checkweigher, the method comprising: independently sensing a pack on a conveyor...and providing a message independent of the checkweigher..." The references do not show such independence.

Independence of the integrity checking from the checkweigher itself is very clear from the claims. The Final Office Action appears to describe elements from the references as being independent, when they are clearly part of a checkweigher, or have nothing to do with the checking of the operation of a checkweigher. The elements of references must be arranged as claimed in order to establish a prima facie case of obviousness. Since the elements are not so arranged in the references, and there is no suggestion to do so, a proper prima facie case of obviousness has not been established, and the rejection should be withdrawn.

Independent claim 27 uses logic independent from the checkweigher. It includes receiving accept and reject signals from the checkweigher. Applicants do not see where this element is addressed in the Final Office Action. It also generates messages regarding the integrity of the checkweigher. Again, this element does not appear to be addressed in the Final Office Action. Dependent claims 28-34 are believed allowable for at least the same reasons as claim 27.

Independent claim 35 refers to a kit to check the integrity of a checkweigher that includes independent sensors, as well as the messages independent of the checkweigher. By virtue of being a kit for installing on a checkweigher, it is independent of the checkweigher rather than a part of an existing checkweigher. Nakagawa only discloses an existing weight checker, and does not disclose a kit "for installing on a checkweigher to check the integrity of the checkweigher" as claimed. Since one or more claim elements are lacking from the references, the rejection should be withdrawn.

Independent claim 38 refers to a similar independence in checking the checkweigher integrity, including the sending of messages independent of the checkweigher, which has not been shown by the Final Office Action to be taught by the references.

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Independent claim 41 refers to a similar independence in checking the checkweigher integrity, including the providing of a message independent of the checkweigher, which has not been shown by the Final Office Action to be taught by the references.

Independent claim 45 refers to a similar independence in checking the checkweigher integrity, including generating messages regarding the integrity of the checkweigher system using logic independent from the checkweigher, which has not been shown by the Final Office Action to be taught by the references.

Independent claim 53 refers to a kit for installing on a checkweigher to check the integrity of the checkweigher. It also receives signals from the checkweigher, and receives sensor signals independent of the checkweigher indicative of whether packs are properly accepted or rejected in accordance with the signals from the checkweigher, and generates messages regarding the integrity of the checkweigher. All this is done by a kit, which is by virtue of being a kit for installing on a checkweigher, independent of the checkweigher rather than a part of an existing checkweigher. None of these elements have been shown by the Final Office Action to be taught by the references. As such, the rejection should be withdrawn.

The references are not properly combinable to arrive at the present invention. Even though all the references may be related industrial systems and article handling, there is no suggestion to apply independent integrity checking to a checkweigher. The interpretations of the references are shown above to be improper, thus rendering whatever suggestions identified in the Final Office Action as improper.

The fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990); MPEP § 2143.01. The Office Action points out what each reference does, and then makes the statement that:

"At the time of the invention, it would have been obvious to use the Lhoest's system to feed pharmaceutical to Nakagawa's packaging system with check weighing system. The suggestion/motivation would have been to package pharmaceutical materials that are handled by Lhoest's system. Also Note that Lhoest's system detects weight of various containers and stations. See Lhoest, col. 12, lines 19-23. At the time of the invention, it would have been obvious to use the gap control system of Neary's conveyor system in Lhoest's system. The suggestion/motivation would have been to insure the packages are properly singulated with an adequate gap between them and to carry finished

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

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pharmaceutical packages away from a production point to a distribution point. See Neary, col. 3, lines 36-47."

No identification of where the prior art suggests the desirability of the combination is provided. The Office Action appears to state that the suggestion to combine Lhoest and Nakagawa was to package pharmaceutical materials that are handled by Lhoest. This does not appear to be taken from the prior art. Nakagawa does not have an independent integrity checker for a checkweighing system. Reference to Lhoest detecting weight of various containers and stations also does not suggest the combination. The Office Action indicates that Neary and Lhoest should be combined "to insure the packages are properly singulated", and appears to base the suggestion on the desired result, versus finding the suggestion within the prior art. No motivation having anything to do with independently checking a checkweigher has been established, and the combination still does not teach or suggest all the elements of the claims as arranged in the claims. The rejection should be withdrawn.

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CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6972 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this _____ day of May, 2005.

NATE GANNON

Signature

Name